Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Inquiry Concerning the Deployment of	)	
Advanced Telecommunications	)	CC Docket No. 98-146
Capability to All Americans in a Reasonable	)	
and Timely Fashion, and Possible Steps	)	
to Accelerate Such Deployment	)	
Pursuant to Section 706 of the	)	
Telecommunications Act of 1996	)	

COMMENTS OF CIRCUIT CITY STORES, INC.

CIRCUIT CITY STORES, INC.

Alan McCollough
President & COO

W. Stephen Cannon
Sr. Vice President & General Counsel

Circuit City Stores, Inc.
9950 Mayland Drive
Richmond, VA 23233
(804) 527-4014

Dated: September 14, 1998

TABLE OF CONTENTS

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Inquiry Concerning the Deployment of	)	
Advanced Telecommunications	)	CC Docket No. 98-146
Capability to All Americans in a Reasonable	)	
and Timely Fashion, and Possible Steps	)	
to Accelerate Such Deployment	)	
Pursuant to Section 706 of the	)	
Telecommunications Act of 1996	)	

COMMENTS OF CIRCUIT CITY STORES, INC.

Circuit City Stores, Inc. ("Circuit City") respectfully submits these comments in response to the Federal Communications Commission ("FCC" or "Commission") August 7, 1988 Notice of Inquiry ("Notice") in the above-captioned proceeding.

I. Introduction

Circuit City is the nation's largest retailer of brand name consumer electronics and appliances. Based in Richmond, Virginia, Circuit City has 562 stores in 44 states, including 502 Circuit City Superstores, 52 Circuit City Express stores, and 4 "electronics only" stores. Circuit City employs more than 40,000 associates and in 1997 had more than $8 billion in retail sales.

Circuit City's interest in this Commission proceeding is the promotion of the competitive availability of the devices and services that provide access to the national platforms comprising "advanced telecommunications" capabilities. In particular, the Comments of Circuit City are addressed to the competitive availability of the broadband network services that will be available over cable gateways. It would be ironic if, just as the

market for access devices is being subjected to competition for the first time, the market for the vital broadband access itself were to be captured by monopoly. Circuit City believes that a potentially vigorous and competitive consumer market for such services will invite new entry that is clearly in the public interest.

Circuit City recognizes that the Commission's resolution of issues concerning Internet access and the provision of Internet services by certain regulated industries has broad implications for both providers and consumers of Internet-based services. In this regard, Circuit City supports regulatory actions and policies that will achieve the greatest levels of competition and consumer choice in the commercial availability and sale of the cable modems used to provide access to these services. Additionally, Circuit City has a strong interest in ensuring the emergence of a vigorous and competitive market for all advanced telecommunications capability and advanced services and, in particular, for Internet-based services provided over broadband data networks.

The Commission's regulatory treatment and classification of cable operators providing Internet-based data services over their broadband cable networks will in many ways determine how the market for these advanced telecommunications capabilities and services will develop. As discussed more fully below, Circuit City supports Commission policies and classifications that would treat these cable operators as carriers of telecommunications services subject to regulation under Title II of the Communications Act. The resultant promise of access to competitive Internet access and online service providers to the cable industry's high-speed broadband networks will ensure that the market for broadband services includes numerous players, permits entry, and remains vibrant and competitive.

By contrast, if cable operators providing Internet-based services over their broadband

cable systems are not required to offer network access to competitive service providers, then the cable industry will grow to hold a bottleneck on access to broadband data services. At a time when the Commission has begun to ease the cable industry's bottleneck over customer-procured devices and hardware, it would be unfortunate if it created a new bottleneck in the realm of access to broadband data services. Just as the Telecommunications Act of 1996 requires telcos to open their networks for increased consumer choice, monopoly cable companies should be forced to do the same. Cable operators should not be permitted to control access to developing broadband technologies such as Internet-based services carried over cable systems. As discussed more fully herein, such a result would be contrary to the competitive intent of the Telecommunications Act of 1996 and to the rapid deployment of advanced telecommunications capabilities and services.

II. The Provision of Internet-Based Services By Cable Operators Over Their Cable Systems is Properly Classified as the "Deployment of Advanced Telecommunications Capabilities"

In the Notice, the Commission seeks comment, *inter alia*, regarding the extent to which advanced services are being offered, what entities are offering them, what form they are in, and the nature of the demand for these services. As recognized in the Notice, cable television systems now pass virtually every home in the United States and their subscribers constitute approximately 66% of the population. (Notice at p. 13). Recent technical improvements to cable networks have made possible the provision of Internet access at far greater speeds than available over traditional telephone lines. It is Circuit City's position that these technical improvements to cable networks have spurred the development and increased availability of cable's broadband network infrastructure and the cable modem, a device that

permits the deployment of advanced telecommunications capability to residential customers. This process, however, remains in its infancy and must continue to occur and be expanded to ensure the deployment of these advanced services to all Americans.

Residential Internet and online usage has grown tremendously despite disturbingly slow speeds available through existing dial-up telephone modem connections. Although the World Wide Web has been lauded as an interactive panacea, surfing the Web has largely become to narrowband users a "click-and-wait" experience. The resultant frustrations of online users is, in part, driving the growing demand for higher-speed connections.

The near ubiquitous coverage provided by broadband coaxial cable plant provides a potentially powerful platform for providing residences and businesses with high-speed data access. One-way cable television systems, however, must be upgraded into modern two-way networks to support these advanced communications services. This is a technically complex and capital intensive proposition that is best achieved by numerous competing entities.

Hybrid fiber-coaxial ("HFC") networks are replacing the traditional coaxial cable systems, nearly doubling the amount of bandwidth that cable operators can offer. Conventional coaxial cable systems offer downstream broadcast delivery of analog television signals, typically with a capacity of 300 to 450 MHz. The HFC architecture, however, utilizes fiber optic technologies to create a two-way, interactive broadband system with capacity of 750 MHz or more. This permits cable operators to offer a broadband platform for transmitting large amounts of digital information, including voice, data, graphics, and video, at high speeds. These upgraded cable systems can carry data up to 1,000 times faster than transmissions using dial-up modems over ordinary copper twisted pair phone lines and

100 times faster than over ISDN phone lines.[1]

The cable modem is a device that allows high-speed data access, for instance to the Internet, via the HFC cable network. The modem converts the high-speed data transmissions for use in the subscriber's premises. A cable modem will typically have two connections, one to the cable wall outlet and the other to a personal computer. In addition to speed, the cable data network and cable modems offer another key benefit: the connection to the Internet is constant, rather than on a "dial-up" basis. Cable data networks use connectionless technology, much like in an office LAN, and, therefore, a subscriber's PC is always online with the network and busy signals are eliminated. Additionally, subscribers' telephone lines are not busy while they are online.

In January 1996, cable MSOs Comcast, Cox, Tele-Communications, Inc., and Time Warner, operating under a limited partnership known as Multimedia Cable Network System Partners Ltd. ("MCNS") issued a request for proposals ("RFP") to begin developing a set of interface specifications for high-speed cable data services. Cable MSOs MediaOne and Rogers Cablesystems, as well as CableLabs, eventually joined the coalition, which in combination serves 85% of United States cable subscribers. MCNS released its Data Over Cable System Interface Specification ("DOCSIS") for cable modem products to vendors in March 1997. Several vendors are now offering two-way cable modem systems commercially, including Motorola, Inc., Com 21 Inc., Toshiba America Inc., and Zenith Electronics Corp. A host of other vendors similarly plan to introduce commercial two-way cable modem systems

---

[1] Barbara Esbin, "Internet Over Cable: Defining the Future in Terms of the Past," Federal Communications Commission Office of Plans and Policy, Working Paper No. 30 (August 1988) at p. 76.

in the near future.

Additionally, a number of companies are offering comprehensive networking and systems integration services to cable operators entering the high-speed cable Internet business. @Home Corp., which is jointly owned by cable operators Tele-Communications Inc., Cox Communications Inc., Comcast Corp., Rogers Cablesystems Ltd., and Shaw Communications, as well as venture capital firm Kleiner Perkins Caufield & Byers, has built a high-speed data backbone to distribute broadband Internet services through affiliate cable systems. The Road Runner Group is a joint venture between Time, Inc. and Time Warner that has developed a broadband Internet service called Road Runner for deployment by Time Warner Cable systems and those of other MSOs. Both Road Runner and @Home offer their respective Internet-based services to other cable operators for resale to cable subscribers. Currently, because of the incomplete HFC cable network, cable operators offer high-speed Internet services in selected locations.

The most important factor in and the largest obstacle to the deployment of two-way cable data services is the availability of high-quality two-way HFC plant. Although a few large MSOs have been aggressively investing in the required HFC upgrades, HFC plant availability on the whole remains limited. The lack of rapid cable system upgrades is therefore a major impediment to the widespread deployment of two-way cable modems.

Cable Datacom News estimates that the number of cable modem subscribers in North America reached 250,000 in July 1998, when cable modem service became commercially available to more than 12 million homes.[2] Cable operators in North America are currently

---

[2] *See* "Cable Modem Market Stats & Projections," Cable Modem Info Center, available at http: //cabledatacomnews.com/cmic16.htm.

adding more than 1,000 cable modem subscribers per day, a pace that would result in more than 400,000 subscribers of cable Internet services by the close of 1998 and more than 1 million at the end of 1999.

The explosive growth of the Internet and the rapidly growing demand for higher speed access to Internet-based services indicates the need to encourage the deployment of broadband access to those services. This can be achieved in part through the expansion of the nation-wide HFC cable network and through Commission policies that encourage greater numbers of participants in the markets for cable Internet services and cable modems.

III. Cable Operators That Provide Internet-Based Services Over Their Cable Systems Should be Classified as Telecommunications Carriers Providing Common Carrier Services

The Commission Notice also seeks comment regarding possible regulatory actions that would promote the deployment of advanced telecommunications capability and advanced services to all Americans. How communications services are regulated today depends largely upon what the Commission chooses to call them. These classifications are made based on factors such as the identity of the entity providing the service, the identity of the consumer or entity at the other end, and the type of line or facility linking the two. In the case of high-speed access to Internet-based services over broadband cable systems, the Commission should make its regulatory classification based on the nature of the service being provided.

The Commission is faced with a new mandate to "encourage the provision of new technologies and services to the public,"[3] including a "high-speed, switched, broadband telecommunications capability that enables users to originate and receive Pretty Advanced

---

[3] 47 U.S.C. § 157 (1996).

New Services ("PANS"), including high-quality voice, data, graphics, and video telecommunications using any technology."[4] This broad congressional mandate, combined with the growing demand for advanced services such as the provision of Internet access over HFC cable systems, requires the Commission to take steps that will ensure and facilitate the continued development of HFC networks, thereby increasing demand for cable Internet services and cable modems.

Circuit City urges the Commission to implement the market-opening measure of concluding that the provision of the Internet-based services described above constitute "telecommunications" and not "cable services" or "information services." The newly-revised definitions of "telecommunications," "telecommunications services," and "telecommunications carrier" contained in the Telecommunications Act of 1996 are sufficiently broad to include the provision of high-speed data services over cable systems by cable operators as a new common carrier service

The Communications Act now defines "telecommunications" as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received."[5] A cable operator transmitting data and providing Internet services over its own transmission facilities clearly satisfies the transmission function of the definition. In addition, the remainder of the definition is met because cable Internet subscribers choose what information to view and do so without a change in the form or content of the information. Similarly, cable operators

---

[4] 47 U.S.C. § 157(c)(1) (1996).

[5] 47 U.S.C. § 153(43) (1996).

providing data transmission capability over their cable systems provide "telecommunications service," which is now defined as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."[6]

How the Commission should actually classify these services is also in part a policy question that should properly be resolved through a notice and comment rulemaking proceeding. Any regulatory classification, however, will have far-reaching implications for the market for Internet-based services and the customer-procured devices, such as cable modems, needed to support them. As such, it is Circuit City's position that cable operators' provision of basic data transmission capability is a basic telecommunications service that should be unbundled from any enhanced segment of their offerings. In addition, cable operators should be required to offer broadband network transmission capability, *e.g.*, frame relay, as well as access to their high-speed networks to competing Internet access and online service providers. This regulatory classification will result in the most rapid deployment of cable-Internet advanced telecommunications capability and advanced services and the most competitive environment for that deployment.

The Commission has concluded that Internet access services are appropriately classified as information, rather than telecommunications, services.[7] This classification was based in large part on the fact that Internet access providers do not offer a pure transmission

---

[6] 47 U.S.C. § 153(46) (1996).

[7] *In the Matter of Federal-State Joint Board on Universal Service, Report to Congress*, CC Docket No. 96-45, FCC 98-67 (released April 10, 1998) (hereinafter "Report to Congress") at ¶ 73.

path, but rather lease transmission lines from telecommunications carriers and provide information over those lines.[8] Cable operators providing Internet-based services, however, do so by offering—essentially on a common carrier basis—pure "transmission capacity for the movement of information."[9] As such, the use of cable systems to transmit high-speed data to subscribers via cable modems falls squarely within the definition of "basic service" as set forth in the Commission's *Computer II* Order. Because cable operators are offering these basic telecommunication services, they are subject to Title II common carrier regulation.[10]

Furthermore, as the Commission stated in its recent report to Congress on Universal Service issues, "[a] telecommunications service is a telecommunications service regardless of whether it is provided using wireline, wireless, cable, satellite, or some other infrastructure."[11] Rather, the classification depends upon "the nature of the services being offered to customers."[12] Accordingly, simply because cable operators provide high speed data transmission over coaxial and fiber optic cable and not over the public telephone network does not foreclose their classification as telecommunications carriers providing telecommunications services. The classification of any provider should not depend upon the

---

8 *Id.* at ¶ 66.

9 *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), Final Decision*, 77 FCC Rcd 384, 419 (1980) at ¶ 93, *recon.*, 84 FCC 2d 50 (1980), *further recon.*, 88 FCC2d 512 (1981), *aff'd sub nom., Computer and Comm. Indus. Ass'n v. FCC*, 693 F.2d 198 (1982).

10 *Computer and Comm. Indus. Ass'n v. FCC*, 693 F.2d 198 (1982).

11 Report to Congress at ¶ 59.

12 *Id.*

facilities used.[13]

In its April 10, 1998 Report to Congress on issues concerning Universal Service, the Commission explicitly declined to address the regulatory classification that should be afforded to cable operators providing Internet access services.[14] As stated above, the proper classification of these cable operators should be determined in a rulemaking proceeding in which these issues may be fully addressed and analyzed. It is nonetheless Circuit City's position that the Internet-based services being provided by cable operators over their cable systems are telecommunication services within the meaning of the Telecommunications Act of 1996.

IV. The Classification of Cable Operators That Provide Internet-Based Services Over Their Cable Systems as Telecommunications Carriers Will Result in the Most Rapid and Competitive Deployment of Advanced Telecommunications Capability

If the provision of Internet-based services over cable systems constitutes basic telecommunications services under *Computer II* and the 1996 Act, then cable operators' provision of those services must be regulated under Title II of the Communications Act. As a result of this classification, under the Commission's *Frame Relay Order*,[15] cable operators

---

[13] *Id.*

[14] Report to Congress at p. 36, n.140.

[15] In *Matter of IDCMA Petition for Declaratory Ruling that AT&T's Interspan Frame Relay Service is a Basic Service*, 10 FCC Rcd 13717 (Common Carrier Bureau, October 16, 1995), the Commission ruled that all carriers owning common carrier transmission facilities that provide enhanced services must unbundle basic from enhanced services and offer transmission capacity to other enhanced service providers under the same tariffed terms and conditions under which they provide such services to their own enhanced operations.

would unbundle basic transmission capabilities from any enhanced services they offer. In addition, cable operators providing these services would be required to provide basic frame relay transmission capability, which would give competing Internet access and online service providers access to the high-speed HFC network. There are numerous policy justifications for regulating cable operators that provide Internet-based services over their system in this manner.

By permitting access to competing providers of Internet service over the new, high-speed HFC cable facilities, this regulatory classification will speed the deployment of advanced telecommunications services and capabilities that is mandated by Section 706. By being offered competitive access, more entrants will contribute to the construction of the necessary facilities to provide these services, thereby creating demand and speeding the nationwide deployment of these services. Requiring competitive access to broadband cable networks would permit cable companies to recover many of their investment costs from the competitive access providers that lease capacity on their networks. In this way, cable operators—who have already begun investing in these networks—will have the ability recover the fixed cost of investment and, as a result, the amount of investment in these networks will increase.

As discussed above, the demand for high-speed Internet access via cable modems is present and growing. Meeting that demand in the most efficient way can be best achieved with greater numbers of entrants competing with each other for subscribers. In addition, with access to the cable operators' high-speed networks, competing providers will create a more competitive market for the customer-procured cable modems necessary for service. As more

entrants compete for subscribers, consumers will be presented with more choice in the Internet-based services they are offered, as well as in the electronic devices required for those services.

Without access to cable operators' high-speed networks to competing Internet access and online service providers, there is a danger that cable operators will create a new "local loop" monopoly for broadband services. Advanced broadband telecommunications capabilities should be permitted to develop and become increasingly available to all Americans in markets that are open to competitive entrants and not governed by monopoly power. Failing to regulate cable operators that provide data transmission capability over their networks as telecommunications carriers subject to Title II would essentially permit cable to maintain a monopoly over the rapidly-expanding market for broadband data services. Such a policy would not encourage the "deployment of advanced telecommunications capability" and certainly would not ensure the deployment of those capabilities to all Americans.

By not permitting access to their high-speed networks to competing Internet access and online service providers, cable operators would be in the enviable position of becoming the dominant providers of broadband access to data networks and the Internet. Without network access to competing Internet access and online service providers, therefore, cable operators will likely begin to occupy a bottleneck position, controlling entirely access to newly-developing high-speed networks. As broadband Internet access becomes more predominant, as it is sure to do, Internet access and online service providers would face a competitive threat to their ability to reach end users.

Circuit City urges the Commission to prevent this result by regulating these services as telecommunications services and requiring cable operators to provide access to competing

providers of Internet-based services. As with telcos that are required by the 1996 Act to open their networks and relinquish their local loop monopolies, cable operators should be forced to open their broadband networks and provide competitive access. Only such a result will ensure the continued, rapid deployment of advanced, broadband networks.

V. Conclusion

The deployment on a nationwide scale of Internet-based services over high-speed, broadband cable networks is currently in its infancy, but growing rapidly. The cable industry's traditional one-way system is being transformed into a two-way, broadband platform with the potential to offer a wide range of telecommunications and information services to residential and business customers throughout the United States. The industry has witnessed a huge growth in the demand for the cable modems that converts high-speed data transmissions over cable systems for use by subscribers. In order to ensure and facilitate the continued expansion of the market for high-speed Internet-based services provided over new cable systems and for the cable modems necessary to support those services, the Commission should implement a regulatory classification that will spur competition and demand for these growing services. By regulating cable operators that provide Internet-based transmission

services over their cable networks as common carriers and requiring that they provide network access to competing Internet service providers, the Commission will foster the most rapid and competitive deployment of this type of advanced telecommunications capability.

Respectfully submitted,

CIRCUIT CITY STORES, INC.

Alan McCollough
President & COO

W. Stephen Cannon
Sr. Vice President & General Counsel

Circuit City Stores, Inc.
9950 Mayland Drive
Richmond, VA 23233
(804) 527-4014

Dated: September 14, 1998